



US Army Corps
of Engineers
St. Paul District

Information Paper

Environmental Protection: Mississippi River, Bussey Lake, Guttenberg, Iowa



Bussey Lake dredged area in pool 10 of the Mississippi River, Iowa

Contact

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Location/Description

Part of the Corps' Environmental Management Program (EMP), Bussey Lake is a 213-acre backwater lake located on the Iowa side of the Mississippi River, approximately two miles above Lock and Dam 10 at Guttenberg, Iowa. The site lies within the Upper Mississippi River National Wildlife and Fish Refuge. Bussey Lake supports an excellent fishery, but sedimentation from the Buck Creek watershed and the main channel reduced water depths in the lake. Shallow depths increased the growth of emergent aquatic plants and accelerated eutrophication. The sedimentation problem would result in continued degradation of the lake and eventual loss of the lake fishery. The project was constructed in two stages. Stage 1 included dredging 12,000 linear feet of channels in the lake to rehabilitate fish habitat. Half of the dredged material was placed at the Guttenberg Waterfowl Ponds project to create an additional moist soil unit and to improve the operability of the existing ponds. The rest was placed at the Willow Island placement site just downstream of Bussey Lake. Stage 2 installed a gate on an existing culvert to control flow from Buck Creek into the north end of Bussey Lake. Deepening 29 acres of Bussey Lake expanded the available fish habitat and the gated structure reduced sediment transport into the lake. The project provides 15 acres of managed habitat and 35 acres of enhanced habitat at the waterfowl ponds and 10 acres of island habitat at Willow Island.

Status

The Stage 1A construction contract was awarded in June 1992 and completed in October 1994. The Stage 1B contract was awarded in May 1995 and was completed in June 1996. The Stage 2 contract was awarded in October 1994 and was completed in November 1995. The project has been transferred to the U.S. Fish and Wildlife Service for operation and maintenance.

Authority

The Bussey Lake Habitat Project was planned under the authority of the Upper Mississippi River System - Environmental Management Program (EMP) and constructed in accordance with a Definite Project Report dated August 1990. The EMP was authorized by Section 1103 of the Water Resources Development Act of 1986, and reauthorized by the Water Resources Development Act of 1999.

The project was planned and designed as part of a cooperative effort between the U.S. Army Corps of Engineers, the Iowa and Wisconsin Departments of Natural Resources, the U.S. Fish and Wildlife Service, and local interests.

Fiscal

Most of the project design and construction costs were 100 percent Federal because most of the project is located on national wildlife refuge lands. Operation and maintenance costs for the features on the Refuge are 100-percent Federal (a responsibility of the U.S. Fish and Wildlife Service). However, the Buck Creek gate installation and Willow Island placement site are not located on the Refuge. Therefore, these construction costs were shared 75-percent Federal/25-percent non-Federal. Operation and maintenance costs of these features are the responsibility of the non-Federal sponsor. The non-Federal sponsor is the Iowa Department of Natural Resources.

Federal Cost	\$3,432,000
Non-Federal Cost	\$162,000
Total Cost	\$3,594,000